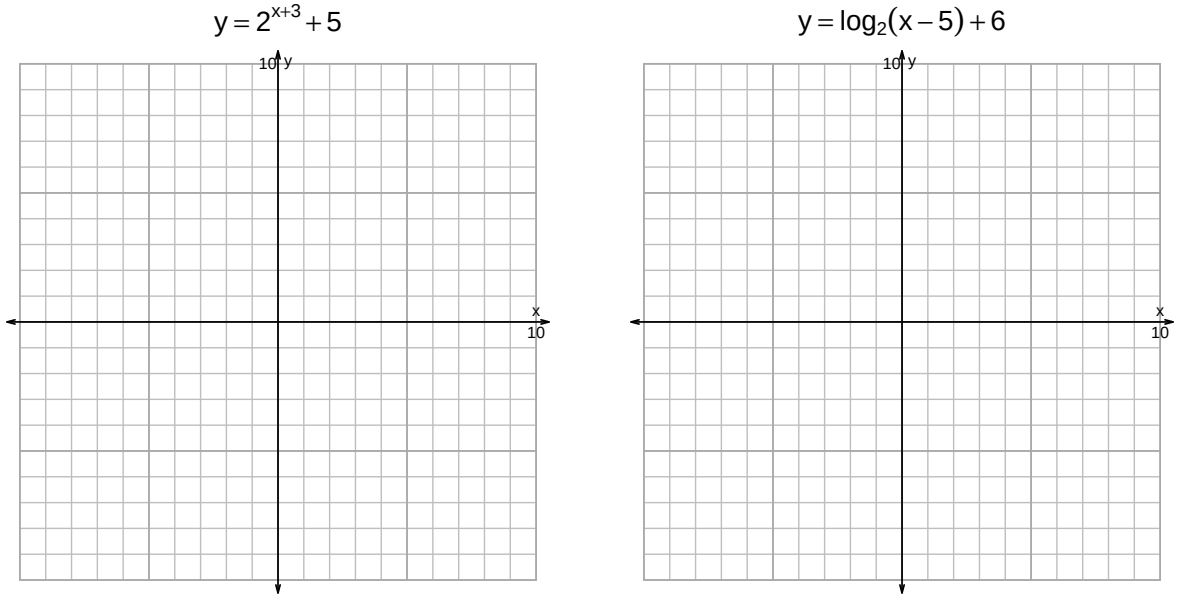
Name: Date:

s18quiz: EXP LOG (Practice v120)

1. Graph $y = 2^{x+3} + 5$ and $y = \log_2(x-5) + 6$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$19 = \left(\frac{3}{5}\right) \cdot 10^{-4t/7}$$

3. An exponential function $f(x) = 19 \cdot e^{-0.65x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-0.7)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(4)$.